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PN - JP6032774 A 19940208
PD - 1994-02-08
PR - JP19920227742 19920713
OPD - 1992-07-13
TI - STABILIZATION OF VITAMIN A
IN - YANAGIDA TAKESHI;SAKAMOTO OKIHIKO
PA - SHISEIDO CO LTD
IC - C07C403/08 ; C07C403/12

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TI - Stabilisation of vitamin=A, useful in dermatology, etc. - by co-existing vitamin=A with basic amino acid, amino acid salt, and water soluble benzophenone deriv., etc.

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PA - (SHIS) SHISEIDO CO LTD

IC - C07C403/08 ;C07C403/12

AB - J06032774 Method comprises coexisting vitamin A with basic amino acid, basic amino acid salt, acidic amino acid, acidic amino acid salt, oil soluble benzophenone deriv., water soluble benzophenone deriv., pentaerythritol fatty acid ester, trimethylolpropane fatty acid ester, water swelling clay mineral, cyclodextrin deriv. composing antioxidant, cyclodextrin deriv. composing UV absorbent and/or citrate.

- Pref. the vitamin A is, for example, vitamin A (retinol), vitamin A acetate (retinol acetate) and vitamin A palmitate (retinol palmitate), pref. all trans type or 13-cis type. The amt. of the basic amino acid and/or is salt is not less than 0.001 wt.% and pref. not more than 10 wt.%. The amt. of the acidic amino acid and/or its salt is not less than 0.001 wt.%, and pref. not more than 20 wt.%. The amt. of the benzophenone deriv. is not less than 0.001 wt.%, and pref. not more than 20 wt.%. The amt. of the pentaerythritol fatty acid ester is pref. not less than 0.1 wt.%. The amt. of the water soluble swelling clay mineral is not less than 0.1 wt.%, pref. not less than 0.1 wt.%. The amt. of cyclodextrin deriv. is not less than 0.01 wt.%, pref. 0.1 wt.%. The amt. of the antioxidant is pref. not less than 0.001 wt.%, more pref. not less than 0.01 wt.%, further more pref. not less than 0.03 wt.%. The amt. of the UV absorbent is pref. not less than 0.001 wt.%, more pref. 0.01 wt.%. The amt. of the citrate is not less than 0.001 wt.%.
- USE/ADVANTAGE - Vitamin A is an important substance in

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dermatology, biochemistry, medicine, pharmacology and healthy foods. This method can improve the stability of vitamin A.,

- In an example, the retinol oil comprised retinol acetate (10 wt.%), olive oil (25 wt.%) and pentaerythritol-tetra-(2-ethylhexanoic acid) ester (65 wt.%). After 30 days at 25 deg. C the absorbance analysis with isopropanol (Japan Pharmacopoeia 11) showed 98% existence of retinol (compared with 75%; retinol 10 wt.%, olive oil 90%). (Dwg.0 /0)

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IN - YANAGIDA TAKESHI; others:01

PA - SHISEIDO CO LTD

TI - STABILIZATION OF VITAMIN A

AB - PURPOSE: To significantly improve the stability of vitamin A and/or an fatty acid ester thereof.

- CONSTITUTION: Vitamin A and/or a fatty acid ester thereof is incorporated with at least one kind of substance selected from basic amino acids, basic amino acid salts, acidic amino acids, acidic amino acid salts, oil-soluble benzophenone derivatives, water-soluble benzophenone derivatives, pentaerythritol fatty acid esters, trimethylolpropane fatty acid esters, water-swelling clay minerals, antioxidant clathrate-formed cyclodextrin derivatives, ultraviolet light absorber clathrate-formed cyclodextrin derivatives and citrates.

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